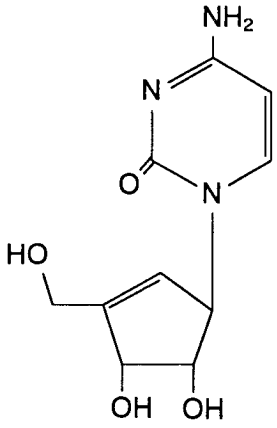
CYCLOPENTENYLCYTOSINE

NSC - 375575



Chemical Name: 4-Amino-1-[4,5- dihydroxy-3-(hydroxymethyl)-2-cyclopenten-1-yl]-2(1*H*)-pyrimidinone, (1*R*-(1α,4β,5β))-

Other Name:
CPE-C

CAS Registry Number: 90597-22-1

Molecular Formula: $C_{10}H_{13}N_3O_4$ **M.W.:239.2**

Approximate Solubility: (mg/mL)

Water	7.5
Acetate buffer, pH 4	10.0
Carbonate buffer, pH 9	7.5
0.1 N HCl	15.0
0.1 N NaOH	7.5
Ethanol	< 1
Methanol	< 1

Butanol	< 1
Dimethylacetamide	> 30.0
DMSO	> 30.0
Acetonitrile	< 1
Ethyl acetate	< 1
Chloroform	< 1
Toluene	< 1

Stability:

Bulk:

CPE-C was found to be stable under the following conditions: room temperature, dark; room temperature, light; 50 °C, dark; 50 °C, light.

Solution:

CPE-C was found to be stable at room temperature in 0.9% saline over a 75 hr period under exposure to light.

Ultraviolet Absorption:

(H_2O)

λ_{max} = 275 ± 2nm ε = 9708 ± 184

High Performance Liquid Chromatography:

Column:	Beckman Ultrasphere, 5μ, 4.6 x 250 mm
Mobile Phase:	Methanol: 5 mM heptanesulfonic acid (20:80) adjusted to pH 3.2 with sulfuric acid

Flow Rate:	1.0 mL/min
Detection:	280 nm, 0.5 AUFS
Sample Preparation:	20 μL of 0.12 mg/mL solution in mobile phase
Internal Standard:	phenol, 2 μL/mL in mobile phase
Retention Volume:	16 mL (NSC 375575) 26 mL (I.S.)

Optical Rotation:

(c = 0.3,0.1M phosphate buffer) $[\alpha]_D^{23} = -95 \pm 5°$